

Memorandum

To : California Regional Water Quality Control Board
3374 East Shields Ave., Room 18
Fresno, California 93726

Date : August 29, 1984

Subject: WATER DISPOSAL PROJECT
Kern River Field
Santa Margarita Zone
Sec. 3, 10, & 11
T. 29S, R. 28E

From : Department of Conservation—
Division of Oil and Gas

Place: 4800 Stockdale Hwy., Suite 417
Bakersfield, Ca. 93309

Attached is an application from Shell California Production Inc. to conduct a water disposal project in the Santa Margarita zone, Kern River field.

The operator proposes to drill/~~convert~~ well "McManus" WD-1, to injection for disposal of oilfield produced brines. Additional details are:

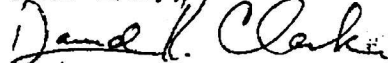
1. The base of freshwater is 800' - 1000' below the zone of injection.
2. See attached for injection water analysis.
3. Zone water analysis shall be submitted prior to commencing injection. *OK*
4. See attached for well location.
5. The injection zone is overlain by oil producing sands and sequences of interbedded sands and silts. There are eleven wells within the 1/4 mile area of influence that were completed and abandoned prior to 1915 and therefore complete and accurate well histories are not available. It is highly improbable that any of these wells penetrated the zone of injection. The oil-bearing zones overlie the intended injection zone in this area by as much as 1000'. If any future evidence indicates migration of injection or formation fluid to the surface thru any of these wells, injection will cease and immediate remedial action will be taken.

Additional supportive data, which are interpretive and therefore confidential, are available for your inspection at this office.

The proposed injection zone has been exempted by the EPA.

Please submit to this office any comments you may have on this proposed project. Your comments are due within 14 calendar days from the date of this letter.

Yours truly,



David R. Clark,
Associate Oil & Gas Engineer

DRC:nj
Enclosures
cc: EPA

DWR

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS4800 STOCKDALE HWY., SUITE # 417
BAKERSFIELD, CALIFORNIA 93309
(805) 322-4031

August 29, 1984

Shell California Production Inc.
P.O. Box 11164
Bakersfield, Ca. 93389WATER DISPOSAL PROJECT
Kern River Field
Santa Margarita Zone
Sections 3, 10, 11
T. 29S, R. 28E

Gentlemen:

Your proposal to expand a water disposal project in the Santa Margarita zone, Kern River field, has been received. The application has been forwarded to the Regional Water Quality Control Board for comments, and the review process under Federal UIC regulations has begun.

You will be notified of our decision regarding project approval as soon as possible. If you have any questions concerning the status of your application, please contact this office.

Yours truly,

David R. Clark,
Associate Oil & Gas Engineer

NOTES:

1. An injection zone analysis shall be submitted to this office prior to final approval and commencing of injection.
2. "Blanket" approval for unlimited injection for any given operator, field, area, and/or pool cannot be given. Under federal regulations each well application must be considered on its own merits and if deemed an expansion to the existing project (either by total injection fluid volume, geographic area, and/or number of wells), must under go the Federal U.I.C. review process.

DRC:nj

PROOF OF PUBLICATION

STATE OF CALIFORNIA, }
County of Kern, } ss.

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the assistant principal clerk of the printer of The Bakersfield Californian, a newspaper of general circulation, printed and published daily in the City of Bakersfield, County of Kern, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Kern, State of California, under date of February 5, 1952, Case Number 57610; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

SEPT. 18, 19, 20

all in the year 19 84

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

elnora clarke
Signature

Dated at Bakersfield, CA. 9-20-1984

Elnora Clarke

RECEIVED

SEP 21 1984

**DIVISION OF OIL & GAS
BAKERSFIELD**

Proof of Publication of

NOTICE

RE: SHELL CALIF PROD INC

LEGAL NOTICE

The State Oil and Gas Supervisor has received an application from Shell Calif. Prod. Inc. to conduct an underground injection project for the purpose of Water Disposal into the Santa Margarita Zone(a) in the SE corner of section 3, T.29S, R.34E, Kern River Field, Kern County. A description of the proposed project can be obtained from the Division of Oil and Gas, 4800 Stockdale Hwy., Suite 417, Bakersfield, California 93309, (805) 322-4031.

Comments on this project should be submitted to the above office no later than 15 calendar days from publication of this notice.

September 18, 19, 20, 1984 (25787)

PROOF OF PUBLICATION

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS4800 STOCKDALE HWY., SUITE # 417
BAKERSFIELD, CALIFORNIA 93309
(805) 322-4031

DRAFT

WATER DISPOSAL PROJECT
Kern River Field
Santa Margarita Zone

September 17, 1984

Shell California Production Inc.
P.O. Box 11164
Bakersfield, Ca. 93389

Dear M. F. Jacintho:

Your proposal to expand a water disposal project in the Santa Margarita zone, Kern River field, is approved provided:

1. Form OG105 or Form OG107 shall be used whenever a new well is to be drilled for use as an injection well, or whenever an existing well is to be converted to an injected well even if no work is required. (Specific requirements will be outlined in our answer to your notice.)
2. A monthly statement shall be filed with this Division on our Form OG110B on or before the last day of each month, for the preceding month, showing the amount of fluid injected, pressure required and source of injected fluid.
3. A chemical analysis of the fluid to be injected shall be made and filed with this Division whenever the source of injection fluid is changed, or as requested by this office.
4. An accurate, operating pressure gauge or chart shall be maintained at the well-head at all times. Additional pressure monitoring devices may be required for wells equipped with packers or multiple tubing strings.
5. Injection profile surveys for all fluid injection wells shall be filed with the Division within three (3) months after injection has commenced; once every year thereafter, after any significant anomalous rate or pressure change, or as requested by the Division, to confirm that the injection fluid is confined to the proper zone or zones. This monitoring schedule may be modified by the district deputy. This office shall be notified before such surveys are made, as surveys may be witnessed by a Division inspector.
6. Data shall be maintained to show performance of the project and to establish that no damage to life, health, property or natural resources is occurring by reason of the project. Injection shall be stopped if there is evidence of such damage of loss of hydrocarbons, or upon written notice from the Division. Project data shall be available for periodic inspection by Division personnel.
7. The injection pressure gradient at the top of the injection zone in any injection well shall not exceed 0.8 psi/ft., without approval from this Division. Additional tests may be required to establish that no damage will occur due to excessive injection pressure.

Page 2

8. All injection piping, valves, and facilities shall meet or exceed design standards for the injection pressure and shall be maintained in a safe and leak-free conditions.
9. This office shall be notified of any anticipated changes in a project resulting in alteration of conditions originally approved, such as: increase in size, change of injection interval, or increase in injection pressure. Such changes shall not be carried out without Division approval.
10. Additional data will be supplied upon the request of the Division.

Yours truly,

A. G. HLUZA
A. G. HLUZA,
Deputy Supervisor

cc: RWQCB